Descriptive Survey of Idaho Rural Health Clinics

Office of Rural Health and Primary Care

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Larry Nielsen

Graduate Student, Master of Health Science Program

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Master of Health Science Program

College of Health Sciences

Boise State University

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DESCRIPTIVE SURVEY OF IDAHO RURAL HEALTH CLINICS

Executive Summary

In the spring of 2005, the Idaho State Office of Rural and Primary Care commissioned a survey of the state's 42 Rural Health Clinics to gather information about staffing needs and use of technology. The survey also sought input from the clinics on topics they would like to have addressed in upcoming workshops hosted by the Office of Rural Health and Primary Care.

The survey questionnaire was mailed to all 42 of Idaho's Rural Health Clinics (RHCs). One clinic returned the survey and indicated it was closing in the near future. Thirty-three participants returned completed surveys for a response rate of 81% (33 out of 41 clinics).

The results captured both the diversity and similarities among Idaho's RHCs. Clinics were diverse in terms of size with active patient pools ranging from 250 to 12,128 and length of certification ranging from 3 – 31 years. Common themes included on-site computer capabilities, i.e., all but one clinic had access to at least one computer with web-capabilities, and the use of computers for quality or performance improvement and training. Another similarity was the reported low levels of awareness and use of the Digital Medical Library, partially funded by the Office of Rural Health and Primary Care.

Information gathered on current openings for clinic staff revealed a need for primary care providers, nursing staff (RN, LPN, CNA), and office support staff. When asked to identify desired workshop topics the most requested topics were quality improvement, billing, reimbursement, "rural health clinic 101", office management, electronic medical records, risk management, and patient safety.

Findings from this survey provide Idaho's Office of Rural Health and Primary Care with valuable information for use in program planning and resource allocation. For example, based on the results of this survey clinic staffing levels continue to be a concern. In addition, information on the level of awareness and use of the Digital Medical Library and workshop topics of interest will assist the Office meet the needs of Idaho's RHCs.

Introduction and Background

The Idaho State Office of Rural Health and Primary Care, part of the state Department of Health and Welfare, offers technical assistance to organizations considering certification as Rural Health Clinics (RHC) and those currently certified. To qualify as a Rural Health Clinic, the clinic must be located in a non-urbanized area and serve an area or population group identified as medically underserved or designated as a health professional shortage area (Rural Health Clinics).

In the spring of 2005, the Idaho State Office of Rural Health and Primary Care commissioned a survey of the state's 42 Rural Health Clinics to gather information about general characteristics, staffing and use of technology in those clinics. The survey also sought input from the clinics on topics they would like to have addressed in upcoming workshops hosted by the office.

Method

A survey questionnaire was developed jointly by the researcher and the Manager of the Office of Rural Health and Primary Care, see Appendix A. It was reviewed by the Director of the Master of Health Science program at Boise State University for internal validity.

The Office of Rural Health and Primary Care mailed the survey questionnaire to all 42 of Idaho's Rural Health Clinics (RHCs). The questionnaire was accompanied by a cover letter with instructions for returning the survey and offering a $1,000 scholarship to support quality and performance improvement efforts to respondents who returned a completed survey by June 6, 2005. Respondents returned the completed surveys to the Office of Rural Health and Primary Care by mail.

The Office of Rural Health and Primary Care collected the returned surveys and masked information identifying the clinic from copies delivered to the researcher. The researcher consolidated the survey data and conducted descriptive statistical analysis.

Results

Surveys were sent to all 42 Rural Health Clinics located in Idaho. One clinic reported that it would be closing soon. Thirty-three of the remaining 41 Idaho RHCs returned completed surveys for a response rate of 81%. Respondents were asked to identify the location, catchments, number of years of certification, and size of the clinic. Figure 1 shows the approximate geographic distribution catchments of responding RHCs, based on the answers to survey question 4, "Please identify the community or geographic service area of your clinic." In a side-by-side comparison, Figures 1 and 2 show that these service areas closely match the distribution of RHCs in Idaho. The median years of certification was 6 (range 3 – 31) and median number of active patients was 3,000 (range 250 - 12,128).

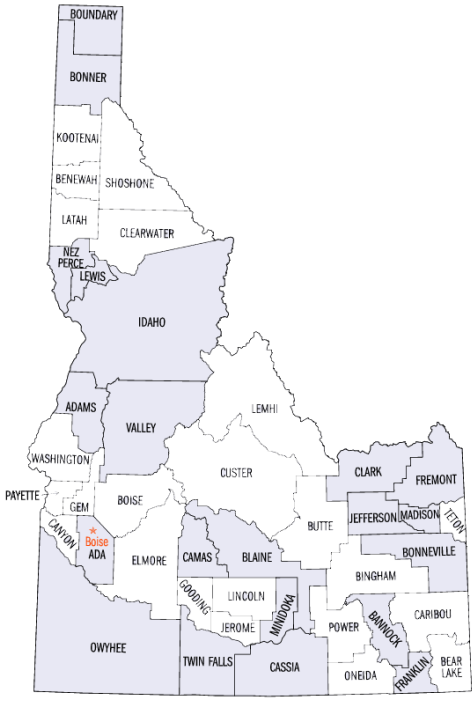

Figure 1: Approximate catchments of responding RHCs.

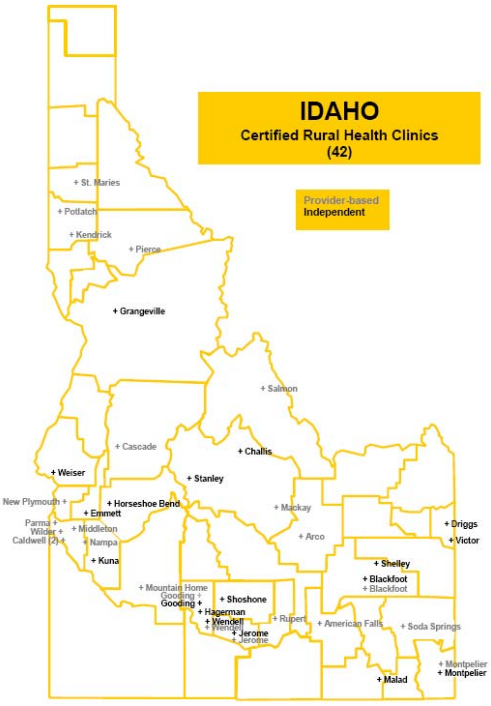

Figure 2: Locations of Idaho RHCs (2005) Source: Idaho Office of Rural Health and Primary Care

Table 1. Length of operations as a certified clinic and clinic size

Characteristic	n	Mean	Median	Std Dev	Min	Max
Years of certification	33	7.67	6.00	7.24	3	31
Active Patients	30	3,875.30	3,000.00	3,269.84	250	12,128

The majority of respondents (n=18, 55%) were provider-based (Table 2). Less than half (n=14, 42%) reported membership in the Idaho Rural Health Association (IRHA). Fewer still were members of either the National Rural Health Association (NRHA) or the National Association of Rural Health Clinics (NARHC).

Respondents were asked about language services, staffing levels, current staffing needs, and hours of operation (Table 2). Most (n=28, 85%) provide language services, either in-house, contracted, or through Language Line™. Three-fourths of respondents (n=25, 76%) reported having a physician (MD) on staff and all respondents had at least one other primary care provider (physician assistant [PA], nurse practitioner [NP] or certified nurse midwife [CNM]) on staff. The majority (n=27, 82%) had a PA, 15 (45%) had a NP with 3 (9%) indicating a CNM as additional primary care providers. Only two respondents indicated utilization of mental health providers, i.e., a psychologist or social worker.

Staffing needs reported by respondents included 3 openings for full-time MDs, 1 for a part-time MD, 1 for a full-time PA, and 1 for a part-time NP. There were 2 full-time and 1 part-time openings for nursing staff (RN, LPN, CNA), and 3 full-time and 3 part-time openings for support/billing staff.

Table 2. RHC General Characteristics and Staffing

Characteristic	n	%
Affiliation		
Provider-based	18	55
Independent	15	45
Association membership		
IRHA	14	42
NRHA	6	18
NARHC	7	21
Current Staffing		
MD	25	76
Other Primary care*	33	100
Mental Health **	2	6
RN	8	24
Other Nursing***	25	76
Support****	31	94

*PA (physician assistant), NP (nurse practitioner), or CNM (certified nurse midwife)
** Psychologist or social worker
*** 'Other' includes LPN, NA, CNA
**** Office manager, billing, other support/clerical

All clinics were open Monday through Friday with the exception of one that was open 3 days per week. Another clinic reported curtailing services to 3 days per week in the winter.

Respondents were asked about their use of computers and the internet (Table 3). All but one clinic reported having at least one computer. The median number of computers was 4 (range 1 – 32). Approximately three-fourths of respondents reported using computers for scheduling, billing or electronic claims, 73%, 79%, and 73%, respectively. Other uses for which a majority of respondents used computers were clinical data collection (n=17, 52%), quality or performance improvement (n=21, 64%) and training or conferencing (n=25, 76%). The most frequently reported use of email (n=27, 82%) was for communication with other clinics and/or agencies. The most common reported uses of the internet were accessing drug information and interactions (n=27, 82%), disease information (n=26, 79%), and library searches (n=24, 73%).

Table 3. Uses of computers

Characteristic	n	%
Common uses of computers		
Scheduling	24	73
Billing	26	79
Electronic claims	24	73
Clinical data collection	17	52
Quality or performance improvement	21	64
Training or conferencing	25	76
Internal e-mail	20	61
E-mail to/from other clinics / agencies	27	82
Common uses of internet		
Drug info and interactions	27	82
Specific disease info	26	79
Patient info	21	64
Library searches	24	73
Continuing education	19	58

Respondents were also asked whether they used Telehealth and Telemedicine. Telehealth was defined as the use of telecommunications and information technology to access health information and education services to increase awareness of, or compliance with, medical conditions, treatments, and good health practices. Telemedicine was defined as the use of interactive video and/or store-and-forward consultations to treat patients. Store-and-forward technologies include physicians sending pictures, x-rays, and other patient

information directly to the computer of a specialist, who then sends diagnosis and advice back to the local doctor, who treats the patient and provides follow-up care. Twelve (36%) of respondents reported using Telehealth for MD consults, patient education, and for purposes mentioned under internet use. Only two respondents (6%) reported using Telemedicine, for radiology and echocardiograms.

Respondents were also asked questions about the type of data they collect and the quality improvement efforts they employ (Table 4). The majority of clinics collect data for acute myocardial infarction (AMI) (n=25, 76%), diabetes (n=17, 52%), immunizations (n=19, 58%), and vaccinations (n=20, 61%). Less than 25% of respondents collected data on pneumonia, chest pain, or congestive heart failure. Only 2 (6%) reported collecting data on patient satisfaction. A slight majority (n=18, 55%) use Qualis Health, the quality improvement organization (QIO) for Idaho, for assistance in quality improvement efforts; most (n=26, 79%) get assistance from their area hospital.

Table 4. Quality Improvement and data collection

Characteristic	n	%
Common conditions for which clinic collects data		
AMI	25	76
Diabetes	17	52
Immunizations	19	58
Vaccinations	20	61
Source of assistance for QI efforts		
QIO (Qualis Health)	18	55
Area Hospital	26	79
Network	3	9
None	4	12

Respondents were asked to indicate whether they collect and use data for various purposes. Three-fourths (n=24, 73%) reported using data for improving the quality of patient care. A majority reported using data for implementing or revising protocols (n=22, 67%), risk management (n=18, 55%), identifying continuing education needs for staff (n=17, 52%), and improving office efficiency (n=19, 58%). Fewer than half reported using data for peer review (n=11, 44%), benchmarking (n=11, 44%), or for public reporting (n=13, 49%).

Respondents were asked to rank staff awareness and use of the Digital Medical Library available through Telehealth Idaho using a Likert-type scale of 1 to 5 (Table 5). None of the

respondents ranked their staff as being highly aware or having extensively used the Digital Medical Library.

Table 5. Awareness and use of the digital medical library

Characteristic	n	Mean	Median	Std Dev	Min	Max
Awareness	22	2.2	2	.90	1	4
Use	22	1.8	2	.80	1	4

1 = Not Aware, Low Use to 5 = Very Aware, High Use

Finally, respondents were asked to rank the five most important topics from a list of topics that they would like to have included at a workshop for RHCs scheduled for the Fall of 2005. The ranking of topics was presented to the Office of Rural Health and Primary Care using four different ranking methods: (1) rank based on the mean score for each topic across respondents, (2) rank based on the number of respondents who selected each topic with any score, (3) rank based on the number of respondents who selected a topic as either first or second most important, and a consolidated rank based on taking the mean of ranks (1), (2), and (3), see Appendix B. The Office of Rural Health and Primary Care reported using rank (2) in their planning for the conference.

The topics (in order of rank) that were most commonly ranked either 1 or 2 were Quality Improvement, Billing, Reimbursement, RHC 101, Office Management, Electronic Medical Records, Risk Management, and Patient Safety.

Discussion

Respondents to the survey, while diverse in terms of clinic size, had much in common in terms of staffing and the use of technology. Current openings were reported for primary care, nursing and office support positions. The survey did not collect data on the degree to which respondents considered their openings critical, the degree of difficulty they have in filling openings, or whether they have important staffing needs that are not reflected in open positions because of budgets or other constraints. Such data would give a more complete picture of the extent to which staffing is or is not a concern among RHCs.

Most respondents reported using computers for traditional clinical applications such as scheduling, billing, and process claims electronically. Use of the internet was common for getting information on drugs, drug interactions, and information about specific diseases. Three-fourths of respondents also reported using the internet for library searches although they reported little awareness or use of the Digital Medical Library –that is available through Telehealth Idaho and partially funded by the Idaho Office of Rural Health and Primary Care. This may indicate the need for additional promotion and/or training concerning this service.

Only two respondents reported using telemedicine. This result identifies another area for further research to assess awareness of telemedicine resources, availability of telemedicine opportunities, and barriers to use.

The topic of most interest for conference and workshop presentations was quality improvement. The next four topics of greatest interest related to clinic operations and financing (billing, reimbursement, “RHC 101”, and office management). These were followed by topics that bear directly on quality improvement: electronic medical records, risk management, patient safety, and reducing medical errors. This is further evidence that quality improvement is an important topic for the respondents.

While a majority of clinics reported using data for improving patient care, risk management, and peer review, the survey collected no information about the type or quality of the data or to what extent the data and their uses followed established standards, evidence-based practices, or regulatory requirements.

The results of this survey provide the Office of Rural Health and Primary Care with a snapshot into characteristics of Idaho's certified Rural Health Clinics. This information provides the Office of Rural Health and Primary Care and other stakeholders with greater insight into the RHCs. It provides an evidenced-based foundation for ongoing support and development efforts and an important baseline measure for future assessment activities.

Appendix A

Survey Questionnaire

Idaho Rural Health Clinic Survey

General Clinic Information

Clinic Name: _____

Location: _____

Name of person completing survey: _____

Title / Position: _____ Phone Number: _____

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1. My Clinic is: ☐ Provider-Based ☐ Independent

   If provider-based:

   1a. Name of sponsoring provider: _____

2. Date of initial RHC certification: _____/_____/_____

3. Approximate number of currently active patients: _____

4. Please identify the community or geographic service area of your clinic:

Is your clinic a member of the following organizations?

5. Idaho Rural Health Association ☐ Yes ☐ No
6. National Rural Health Association (NRHA) ☐ Yes ☐ No
7. National Association of Rural Health Clinics (NARHC) ☐ Yes ☐ No

8. Does your clinic offer language interpretive services?

   ☐ Yes – in-house ☐ Yes – contracted ☐ No

9. If no, do you feel there is a need for these services in your clinic?

   ☐ Yes ☐ No

Clinic Operations

Current clinic staff:

Professional Type	# Full-time	# Part-time	N/A
10. Physician			
11. Physician Assistant			
12. Nurse Practitioner			
13. Cert. Nurse Midwife			
14. Clinical Psychologist			
15. Social Worker			
16. Registered Nurse			
17. Office Manager			
18. Billing Staff			
19. Clerical/Support Staff			
20. Other:			
21. Other:			

Current openings for clinic staff:

Professional Type	# Full-time	# Part-time	N/A
22. Physician			
23. Physician Assistant			
24. Nurse Practitioner			
25. Cert. Nurse Midwife			
26. Clinical Psychologist			
27. Social Worker			
28. Registered Nurse			
29. Office Manager			
30. Billing Staff			
31. Clerical/Support Staff			
32. Other:			
33. Other:			

Hours of operation:

	Day	Open	Close
34.	**Sunday**		
35.	**Monday**		
36.	**Tuesday**		
37.	**Wednesday**		
38.	**Thursday**		
39.	**Friday**		
40.	**Saturday**		

Technology

41. How many computers are currently operational in your clinic? _____

Do you use computers for:

42. Electronic Medical Records (EMR)? ☐ Yes ☐ No
43. Scheduling? ☐ Yes ☐ No
44. Physician Order Entry (CPOE)? ☐ Yes ☐ No
45. Billing? ☐ Yes ☐ No
46. Electronic submission of claims? ☐ Yes ☐ No
47. Clinical data collection? ☐ Yes ☐ No
48. Quality or performance improvement? ☐ Yes ☐ No
49. Other (please describe): ☐ Yes ☐ No

During the past 12 months, have you or your staff participated in any of the following types of training?

50. Web-based conference? ☐ Yes ☐ No
51. Web-based training/seminars? ☐ Yes ☐ No
52. Computer-based training– *not* web-based? ☐ Yes ☐ No

53. Does your clinic have high-speed internet access? ☐ Yes ☐ No

Do you use email:

54. For internal communication? ☐ Yes ☐ No
55. To communicate with other clinics/agencies? ☐ Yes ☐ No
56. To communicate with patients? ☐ Yes ☐ No

Do you use the internet for:

57. Drug information and interactions? ☐ Yes ☐ No

58. Specific disease information? ☐ Yes ☐ No

59. Patient information? ☐ Yes ☐ No

60. Library searches? ☐ Yes ☐ No

61. Continuing education ☐ Yes ☐ No

62. Other _____

63. Is your clinic linked to digital medical library through Telehealth Idaho?

☐ Yes ☐ No

If yes, please answer the following:

64. On a scale of 1 to 5 (1 = not aware, 5 = highly aware), to what extent is your staff **aware** of the digital medical library contents (circle one)?

NOT AWARE				HIGHLY AWARE
1	**2**	**3**	**4**	**5**

65. On a scale of 1 to 5 (1 = not used, 5= extensively used), to what degree does your clinic staff **use** the digital medical library (circle one)?

NOT USED				EXTENSIVELY USED
1	**2**	**3**	**4**	**5**

The questions below regard Telehealth and Telemedicine. These are broadly-used terms. For the purposes of this survey, please use the following definitions:

Telemedicine *involves physicians using interactive video and/or store-and-forward consultations to treat patients. This allows medical specialists to directly communicate with patients at a distance using television monitors and specially adapted equipment. Store-and-forward technologies include physicians sending pictures, x-rays, and other patient information directly to the computer of a specialist, who then send diagnosis and advice back to the local doctor, who treats the patient and provides follow-up care.*

Telehealth *expands on the idea of telemedicine. It includes non-clinical services such as medical education, research, and patient awareness campaigns.*

- adapted from ATSP Online, the web site of the Association of Telehealth Service Providers at http://www.atsp.org.

66. Does your clinic make use of Telemedicine services? ☐ Yes ☐ No

67. If yes, please describe your use(s) of telemedicine:

68. Does your clinic make use of Telehealth services? ☐ Yes ☐ No

69. If yes, please describe your use(s) of telehealth:

Quality Improvement

70. Does your clinic have a formal quality improvement plan? ☐ Yes ☐ No

Do you use standardized protocols or clinical guidelines for:

71. AMI (acute myocardial infarction/heart attack) ☐ Yes ☐ No
72. Pneumonia ☐ Yes ☐ No
73. Chest Pain ☐ Yes ☐ No
74. CHF (congestive heart failure) ☐ Yes ☐ No
75. Diabetes ☐ Yes ☐ No
76. Other _____ ☐ Yes ☐ No
77. Other _____ ☐ Yes ☐ No

Do you collect data for any of the following conditions?

78. AMI (acute myocardial infarction/heart attack) ☐ Yes ☐ No
79. Pneumonia ☐ Yes ☐ No
80. Chest Pain ☐ Yes ☐ No
81. CHF (congestive heart failure) ☐ Yes ☐ No
82. Diabetes ☐ Yes ☐ No
83. Other _____ ☐ Yes ☐ No
84. Other _____ ☐ Yes ☐ No

If you collect data, is it used for any of the following? (*check all that apply*)

85. Implementing new protocols or revising existing protocols ☐ Yes ☐ No
86. Risk management ☐ Yes ☐ No
87. Identifying staff continuing education needs ☐ Yes ☐ No
88. Peer review ☐ Yes ☐ No
89. Benchmarking of data ☐ Yes ☐ No
90. Public reporting of data ☐ Yes ☐ No
91. Improving patient care quality ☐ Yes ☐ No
92. Improving office efficiency ☐ Yes ☐ No
93. Other uses (*please describe*):_____ ☐ Yes ☐ No

Do any of the following entities assist with your quality improvement efforts? (*check all that apply)*

94. Quality Improvement Organization (Qualis Health) ☐ Yes ☐ No
95. Your clinic's support hospital ☐ Yes ☐ No
96. Your clinic's network ☐ Yes ☐ No
97. Other _____ ☐ Yes ☐ No

Idaho Rural Health Clinic Workshop

The State Office of Rural Health is planning a one-day workshop for Idaho RHCs. The workshop will be conducted in Boise during the fall of 2005.

98. Would you and/or your staff be interested in attending the workshop?

☐ Yes ☐ No

99. In order to best meet your needs, please rank the **five** most important topics that you would like to include at the fall workshop (enter a '1' for the topic of most interest, '2' for the topic of next most interest, etc.): *(CMS and federal updates will be included in the workshop and not identified as a selection)*

____ Reimbursement issues ____ Cultural Competency ____ Office Management

____ HIPAA ____ Risk management____ Telemedicine

____ Billing / coding ____ Board education ____ Strategic Planning

____ Network development ____ Quality improvement

____ Reducing medical errors ____ Electronic Medical Records

____ Public health/epidemiology in Idaho ____ RHC 101 "nuts and bolts"

____ Improving patient safety

Other workshop topic suggestions: _____

In many states, RHCs have organized to create formal RHC associations. These associations often provide a voice for RHCs, information to citizens, legislators, and government agencies, and typically work to improve healthcare quality in rural communities by promoting collaboration and education.

100. Are you interested in exploring the possibilities of creating some type of RHC network or association in Idaho? ☐ Yes ☐ No

Thank you for taking the time to complete this survey!

Appendix B

Rankings for Workshop Topics

Survey respondents were asked choose five of the sixteen listed suggested topics for the upcoming Rural Health Conference. They ranked them from 1 (Most Important) to 5.

Five of the respondents misread the instructions and simply checked their top five topics but did not rank them. In an attempt to include those preferences into the mix without distorting the surveys in which the topics were ranked correctly, the researcher assigned each checked topic a score of 6. In this way, these preferences figure in the mean scores and in the number who selected the topic, but not in the number who selected the topic 1st or 2nd.

The choices and rankings can be looked at in different ways (Table A).

Table A: Topic rankings using various methods

Topic	Rank - mean	Rank - number who selected topic	Rank - number who selected topic 1st or 2nd	Combined Rank
Reimbursement	3	2	3	2
HIPAA	14	15	13	14
Billing	2	4	2	3
Network Development	12	13	12	12
Reducing Medical Errors	11	12	11	11
Electronic Medical Records	6	1	6	4
Public Health Epidemiology	15	10	14	13
Patient Safety	8	8	8	8
Cultural Competence	16	16	16	16
Risk Management	7	7	7	7
Board Education	13	14	15	15
Quality Improvement	1	3	1	1
Office Management	5	6	5	6
Strategic Planning	10	9	9	9
RHC 101	4	5	4	5
Telemedicine	9	11	10	10

Column one ranks the topics by a calculated average score. Each rank was assigned a numeric score – 5 for the most important (which the respondent gave a rank of 1) to 1 for the topic the respondent gave a rank of 5. An average for each topic was calculated by adding all the scores for the topic and dividing the sum by 33 (the number of total survey respondents).

In the second column, the topics are ranked by the number of respondents who selected them, whatever the respondent's ranking.

The third column ranks the topics by the number of respondents who ranked the topic either first or second, indicating strong interest.

Finally, the last column ranks the topics by averaging their ranks from the other three columns.

References

Rural Health Clinics. (n.d.) Retrieved October 25, 2005, from http://www.healthandwelfare.idaho.gov/DesktopModules/ArticlesSortable/ArticlesSrtView.aspx?tabID=0&ItemID=375&mid=10506/